

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-57. (Cancelled)

58. (Currently Amended) An electrical circuit for driving an amplifier operative to amplify a differential voltage between a pair of signal lines to a full digital logic separation, said circuit comprising:

a switch coupled between a voltage source and an input terminal of said amplifier, said switch operative to raise said input terminal to an intermediate voltage ~~greater than~~ between ground potential and a full supply voltage prior to development of said differential voltage between said pair of signal lines; and

circuitry operative to raise said input terminal of said amplifier to said full supply voltage after said differential voltage develops between said pair of signal lines.

59. (Previously Presented) The electrical circuit of claim 58 wherein said electrical circuit is included in a memory circuit.

60. (Previously Presented) The electrical circuit of claim 58 wherein said electrical circuit is included in a dynamic random access memory (DRAM) circuit.

61. (Previously Presented) The electrical circuit of claim 58 wherein said input terminal is a first input terminal of a PMOS transistor, said PMOS transistor having a second input terminal coupled to one of said pair of signal lines and a third input terminal coupled to the other of said pair of signal lines.

62. (Previously Presented) The electrical circuit of claim 61 wherein said PMOS transistor comprises a low threshold voltage (V_{tp}) PMOS transistor.

63. (Previously Presented) The electrical circuit of claim 62 wherein said V_{tp} is slightly greater than said differential voltage.

64. (Previously Presented) The electrical circuit of claim 62 wherein said differential voltage between said pair of signal lines causes said low V_{tp} PMOS transistor to turn sub-threshold ON.

65. (Currently Amended) The electrical circuit of claim 58 further comprising at least one transistor operative to maintain said input terminal of said amplifier at about ground potential prior to said switch raising said input terminal to said intermediate voltage ~~greater than ground potential~~.

66. (Cancelled)

67. (Currently Amended) The electrical circuit of claim [[66]] 58 wherein said intermediate voltage ~~greater than ground~~ potential is about one-half of said full supply voltage.

68. (Currently Amended) The electrical circuit of claim [[66]] 58 wherein said circuitry raising said input terminal of said amplifier to said full supply

voltage causes said amplifier to amplify said differential voltage between said pair of signal lines to said full digital logic separation.

69. (Currently Amended) A method of driving an amplifier operative to amplify a differential voltage between a pair of signal lines to a full digital logic separation, said method comprising:

raising a voltage at an input terminal of said amplifier to an intermediate voltage greater than between ground potential and a full supply voltage prior to development of said differential voltage between said pair of signal lines; and

raising said input terminal of said amplifier to a full supply voltage after said differential voltage develops between said pair of signal lines.

70. (Previously Presented) The method of claim 69 wherein said raising said voltage at said input terminal of said amplifier comprises raising a voltage at an input terminal of an amplifier included in a memory circuit.

71. (Previously Presented) The method of claim 69 wherein said raising said voltage at said input terminal of said amplifier comprises raising a voltage at an input terminal of an amplifier included in a dynamic random access memory (DRAM) circuit.

72. (Previously Presented) The method of claim 69 wherein said raising said voltage at said input terminal comprises raising a voltage at a first input terminal of a PMOS transistor, said PMOS transistor having a second input terminal coupled to one of said pair of signal lines and a third input terminal coupled to the other of said pair of signal lines.

73. (Previously Presented) The method of claim 72 wherein said raising the voltage at an input terminal of said PMOS transistor comprises raising the voltage at an input terminal of a low threshold voltage (V_{tp}) PMOS transistor.

74. (Previously Presented) The method of claim 73 wherein said raising said voltage at said first input

terminal of a low threshold voltage (V_{tp}) PMOS transistor comprises raising a voltage at a first input terminal of a low threshold voltage (V_{tp}) PMOS transistor having V_{tp} slightly greater than said differential voltage.

75. (Previously Presented) The method of claim 73 wherein said differential voltage between said pair of signal lines causes said low V_{tp} PMOS transistor to turn "sub-threshold ON."

76. (Currently Amended) The method of claim 69 further comprising maintaining said voltage at said input terminal of said amplifier at about ground potential prior to said raising said voltage at said input terminal to said intermediate voltage ~~greater than ground potential~~.

77. (Cancelled)

78. (Currently Amended) The method of claim [[77]] 69 wherein said raising said voltage at said input terminal of said amplifier to a full supply voltage comprises raising said voltage at said input terminal to

a supply voltage about twice said intermediate voltage
~~greater than ground potential.~~

79. (Currently Amended) The method of claim
[[77]] ~~69~~ wherein said raising said voltage at said input terminal of said amplifier to said full supply voltage causes said amplifier to amplify said differential voltage between said signal lines to said full digital logic separation.

80. (Currently Amended) An electrical circuit for driving an amplifier operative to amplify a differential voltage between a pair of signal lines to a full digital logic separation, said circuit comprising:

means for raising a voltage at an input terminal of said amplifier to an intermediate voltage ~~greater than between ground potential and a full supply voltage~~ prior to development of said differential voltage between said pair of signal lines; and

means for raising said input terminal of said amplifier to a full supply voltage after said differential voltage develops between said pair of signal lines.

81. (Currently Amended) The electrical circuit of claim 80 further comprising means for maintaining said voltage at said input terminal of said amplifier at about ground potential prior to said raising said voltage at said input terminal to said intermediate voltage ~~greater than ground potential.~~

82. (Cancelled)